1. What is the purpose of DHCP (Dynamic Host Configuration Protocol)?

a) To assign static IP addresses to devices on a network

b) To dynamically assign IP addresses to devices on a network

c) To secure network connections

d) To configure DNS settings

Answer: b) To dynamically assign IP addresses to devices on a network

Explanation: DHCP dynamically assigns IP addresses to devices on a network, simplifying network administration and reducing the chances of IP address conflicts.

2. What does DHCP leased time refer to?

a) The duration for which an IP address is permanently assigned to a device

b) The duration for which an IP address is temporarily assigned to a device

c) The duration for which a DNS server remains active

d) The duration for which a router forwards network traffic

Answer: b) The duration for which an IP address is temporarily assigned to a device

Explanation: DHCP leased time specifies how long an IP address is temporarily assigned to a device before it must be renewed or released.

3. Which of the following is NOT a DHCP allocation type?

a) Static allocation

b) Dynamic allocation

c) Manual allocation

d) Fixed allocation

Answer: d) Fixed allocation

Explanation: While static, dynamic, and manual allocations are DHCP allocation types, "fixed allocation" is not a recognized term in DHCP configuration.

4. What are DHCP scopes?

a) Ranges of IP addresses available for DHCP assignment

b) Secure areas within a network

c) Types of DHCP servers

d) IP address reservations

Answer: a) Ranges of IP addresses available for DHCP assignment

Explanation: DHCP scopes define ranges of IP addresses that DHCP servers can assign to devices on a network.

5. Which DHCP deployment involves manual assignment of IP addresses to devices?

a) Dynamic allocation

b) Automatic allocation

c) Manual allocation

d) Fixed allocation

Answer: c) Manual allocation

Explanation: Manual allocation involves administrators manually assigning specific IP addresses to devices instead of relying on DHCP to dynamically assign them.

6. What is the purpose of planning DHCP deployment?

a) To ensure a secure network

b) To determine the color scheme of DHCP servers

c) To allocate IP addresses to devices automatically

d) To efficiently manage IP address allocation and network configuration

Answer: d) To efficiently manage IP address allocation and network configuration

Explanation: Planning DHCP deployment involves determining the appropriate DHCP scopes, lease times, and server placement to efficiently manage IP address allocation and network configuration.

7. Which file is commonly used for DHCP server configuration in Unix/Linux systems?

a) dhcpd.conf

b) dhcp.conf

c) dhcp-server.ini

d) dhcp.cfg

Answer: a) dhcpd.conf

Explanation: In Unix/Linux systems, the DHCP server configuration is commonly stored in the dhcpd.conf file.

8. How can DHCP servers be configured to start automatically on system boot?

a) By manually starting the server each time
b) By configuring a cron job
c) By adding a startup script to the system's init or systemd configuration
d) By using a GUI interface

Answer: c) By adding a startup script to the system's init or systemd configuration

Explanation: DHCP servers can be configured to start automatically on system boot by adding a startup script to the system's init or systemd configuration.

9. How do DHCP clients obtain IP addresses?

a) By manually configuring them
b) By requesting them from a DHCP server
c) By querying a DNS server
d) By generating random IP addresses

Answer: b) By requesting them from a DHCP server

Explanation: DHCP clients obtain IP addresses by sending a request to a DHCP server, which then dynamically assigns an available IP address.

10. When might manual DHCP configuration be preferred over automatic DHCP assignment?

a) In large networks where IP addresses rarely change
b) In small networks with a limited number of devices

c) In networks with high security requirements

d) In networks with a dynamic environment and frequent device changes

Answer: c) In networks with high security requirements

Explanation: Manual DHCP configuration might be preferred in networks with high security requirements to ensure precise control over IP address assignments and network access.